

WHAT IS CLAIMED IS:

1. A web server having a user space and an operating system space, comprising:

5 a user space application level interpreter configured to process client requests;

at least one user space kernel extension device driver enabling the application level interpreter to communicate with a network interface; and

10 a user space transmission protocol library enabling the web server to process client requests and the corresponding responses within the user space.

2. The server of claim 1, wherein the interpreter comprises an HTTP interpreter.

3. The server of claim 1, wherein the web server is configured to poll the network interface periodically.

4. The server of claim 1 wherein the library includes TCP/IP library routines.

5. The server of claim 4, wherein the library includes only those routines necessary for processing of requests to and responses from the interpreter.

6. The server of claim 1, wherein the web server includes a user space file cache.

25 7. The server of claim 1, wherein the web server is configured to initiate multiple threads within its user space responsive to user requests.

8. The server of claim 7, wherein the threads include threads selected from the group of threads including perl scripts, cgi threads, and Java servlets.

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9. A web server comprising:

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processor, memory, and input means;

a dedicated network interface and a general purpose network interface

an application level interpreter configured to process client requests;

user space kernel extension device drivers enabling the application level interpreter to communicate with the dedicated network interface; and

a user space transmission protocol library enabling the web server to perform network processing of client requests and the corresponding responses.

10. The server of claim 9, wherein the interpreter comprises an HTTP interpreter.

11. The server of claim 9, wherein the web server is configured to poll the network interface periodically.

12. The server of claim 9 wherein the library includes TCP/IP library routines.

13. The server of claim 12, wherein the library includes only those routines necessary for processing of requests to and responses from the interpreter.

14. The server of claim 9, wherein the web server includes a user space file cache.

15. The server of claim 9, wherein the web server is configured to initiate multiple threads within its user space responsive to user requests.

16. The server of claim 15, wherein the threads include threads selected from the group of threads including perl scripts, cgi threads, and Java servlets.

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17. A computer program product residing on a computer readable medium for processing client requests in a data processing server, comprising:

5 code means for mapping a network interface to the user space of a web server application;

code means for polling the network interface to determine the arrival of a network packet;

10 code means within the web server application user space for processing the network packet;

code means within the web server application user space for interpreting an application layer header of the network packet; and

code means for generating a response to the network packet.

18. The computer program product of claim 17, wherein the code means for processing the network packet comprises a web server application user space TCP/IP library.

19. The computer program product of claim 18, wherein the code means for interpreting the application layer header comprises an HTTP interpreter.

20. The computer program product of claim 17, wherein the code means for generating a response includes user space code means for retrieving an HTML file, user space code means for 25 executing a perl script, and user space code means for executing a Java servlet.

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